

COC# 130

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

(425) 420-9200 (509) 924-9200 (503) 906-9200 FAX 906-9210

(541) 383-9310

420-9210 924-9290

FAX 382-7588

9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

Work Order #: M1 06095 CHAIN OF CUSTODY REPORT

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CLIENT: BRISTOL		INVOICE TO:			TURNAROUND REQUEST in Business Days*				
REPORT TO: ANNE KRANAWET	TER	BRISTOL	-		Organic & Inorganic Analyses				
ADDRESS: AMCHITKA ISLAND.					10 7			< 1	
	10-0975	DO MARIONED			STD. 5		Hydrocarbon Analyses 3 2 1 < 1 < 1		
PROJECT NAME: AMCHITICAL	10-0 (10	P.O. NUMBER: 7	TED ANALYSES		STI				
PROJECT NUMBER: \$1000	- Va				1	OTHER	Please Specify		
SAMPLED BY:	- Magal				*Turnaro	und Requests less	than standard may incur Rush C	Tharges.	
CLIENT SAMPLE SAMPLING	D20 FRX				MATRIX	# OF		NCA WO	
IDENTIFICATION DATE/TIME	ORI				(W, S, O)	CONT.	COMMENTS	ID	
10/AMB975SL 6/30/01 1445	XX								
2.01 AMB976SL 6/30/01 1450	XX								
3.01AMB977SL 6/20/01 1455	XX						i	,	
4.01AM B9 785L 6/30/01 1500	XX								
5.0 AM B9 795L 6/30/01 1505	XX								
6.01AM B9 80SL 6/30/01 1510	XX								
7.01AMB981SL 430/01 1540	XX								
8. OLAM B982SL 6/30/01 1545	XX								
9. OIAM B98354 6/36/01 1550	XX								
10. OLAM B984SL 6130/01 1555	XX		ž .						
11.01AM B985SL 6/30/01 1600	XX								
12.01AM B986SL 6/30/01 1605	χX								
13.01AMB9875L6130/01 1610	XX								
14.0(AMB98882630/01 1615	XX								
15.									
RELINQUISHED BY:	0001	DATE: 6/30/01	RECEIVED BY:	1/h			DATE	: 6/30	
PRINT NAME: Charles Marshall FIRM: B	W1010C	TIME: 1658	PRINT NAME:	Steph Wilre	FIRM:	NCA	TIME	1658	
RELINQUISHED BY:		DATE:	RECEIVED BY:				DATE		
PRINT NAME: FIRM:		TIME:	PRINT NAME:		FIRM:		TIME	l:	
additional REMARKS: COC REV 3/99 BG AGT & Fuel St.	mul "Ho	+ SPOTS"					TEMP:	E OF	



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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/30/01 17:10. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

112

Work Orders included in this report:

M106095



Anchorage, AK 99502-1116

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

Reported:

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 07/03/01 10:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB975SL	M106095-01	Soil	06/30/01 14:45	06/30/01 17:10
01AMB976SL	M106095-02	Soil	06/30/01 14:50	06/30/01 17:10
01AMB977SL	M106095-03	Soil	06/30/01 14:55	06/30/01 17:10
01AMB978SL	M106095-04	Soil	06/30/01 15:00	06/30/01 17:10
01AMB979SL	M106095-05	Soil	06/30/01 15:05	06/30/01 17:10
01AMB980SL	M106095-06	Soil	06/30/01 15:10	06/30/01 17:10
01AMB981SL	M106095-07	Soil	06/30/01 15:40	06/30/01 17:10
01AMB982SL	M106095-08	Soil	06/30/01 15:45	06/30/01 17:10
01AMB983SL	M106095-09	Soil	06/30/01 15:50	06/30/01 17:10
01AMB984SL	M106095-10	Soil	06/30/01 15:55	06/30/01 17:10
01AMB985SL	M106095-11	Soil	06/30/01 16:00	06/30/01 17:10
01AMB986SL	M106095-12	Soil	06/30/01 16:05	06/30/01 17:10
01AMB987SL	M106095-13	Soil	06/30/01 16:10	06/30/01 17:10
01AMB988SL	M106095-14	Soil	06/30/01 16:10	06/30/01 17:10

COC#130

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

07/03/01 10:14

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB975SL (M106095-01) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	256	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	D-14
Surr: 1-Chlorooctadecane Surr: Triacontane	72.3 % 74.1 %	50-150 50-150							
01AMB976SL (M106095-02) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane Surr: Triacontane	84.5 % 141 %	50-150 50-150							
01AMB977SL (M106095-03) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	1060	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane Surr: Triacontane	67.0 % 71.1 %	50-150 50-150							
01AMB978SL (M106095-04) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane Surr: Triacontane	68.8 % 130 %	50-150 50-150							
01AMB979SL (M106095-05) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane Surr: Triacontane	60.8 % 67.3 %	50-150 50-150							
01AMB980SL (M106095-06) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane Surr: Triacontane	59.9 % 121 %	50-150 50-150							

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503.906.9200 fax 503.906.9210

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541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/03/01 10:14

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

			•						
Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB981SL (M106095-07RE1) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/02/01	07/02/01	0107010	
Surr: 1-Chlorooctadecane	86.3 %	50-150	<u> </u>						
Surr: Triacontane	91.1 %	50-150							
01AMB982SL (M106095-08) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane	59.1 %	50-150							
Surr: Triacontane	132 %	50-150							
01AMB983SL (M106095-09RE1) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/02/01	07/02/01	0107010	
Surr: 1-Chlorooctadecane	84.6 %	50-150							
Surr: Triacontane	86.6 %	50-150							
01AMB984SL (M106095-10) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/01/01	0107003	
Surr: 1-Chlorooctadecane	62.5 %	50-150							
Surr: Triacontane	121 %	50-150							
01AMB985SL (M106095-11) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/02/01	0107003	
Surr: 1-Chlorooctadecane	66.2 %	50-150							
Surr: Triacontane	73.0 %	50-150							
01AMB986SL (M106095-12) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/02/01	0107003	
Surr: 1-Chlorooctadecane	77.1 %	50-150			<u></u>				
Surr: Triacontane	131 %	50-150							

North Creek Analytical - Mobile Lab



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509.924.9200 fax 509.924.9290

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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/03/01 10:14

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB987SL (M106095-13) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/02/01	0107003	
Surr: 1-Chlorooctadecane	59.8 %	50-150							
Surr: Triacontane	69.9 %	50-150							
01AMB988SL (M106095-14) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/01/01	07/02/01	0107003	
Surr: 1-Chlorooctadecane	65.5 %	50-150							
Surr: Triacontane	132 %	50-150							

North Creek Analytical - Mobile Lab



Anchorage, AK 99502-1116

Surr: 4-BFB

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

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503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/03/01 10:14

BTEX,MTBE and Naphthalene per EPA Method 8021B

Project Manager: Anne Kranawetter

North Creek Analytical - Mobile Lab Reporting Analyte Result Limit Units Dilution Method Prepared Analyzed Batch Notes 01AMB975SL (M106095-01) Soil Sampled: 06/30/01 Received: 06/30/01 Benzene 0.215 50 !1B BTEX/MTI 06/30/01 07/01/01 0106107 0.0551 mg/kg dry **Toluene** 0.426 0.220 Ethylbenzene 4.00 0.220 Xylenes (total) 4.55 0.441 Naphthalene 4.21 2.20 Surr: 4-BFB 151 % 50-150 S-02 01AMB976SL (M106095-02) Soil Sampled: 06/30/01 Received: 06/30/01 Benzene ND 0.0628 mg/kg dry 50 !1B BTEX/MTI 06/30/01 0106107 Toluene ND 0.251 Ethylbenzene 0.251 ND Xylenes (total) ND 0.502 Naphthalene ND 2.51

01AMB977SL (M106095-03) Soil		Sampled: 06/30/01 Received: 06/30/01						
Benzene	ND	0.0659	mg/kg dry	50	!1B BTEX/MT	1 06/30/01	07/01/01	0106107
Toluene	ND	0.264	"	"	"	"	"	"
Ethylbenzene	1.26	0.264	"	"	"	"	"	"
Xylenes (total)	1.69	0.527	"	"	"	"	"	"
Naphthalene	5.04	2.64	"	"	"	"	"	"
Surr: 4-BFB	93.8 %	50-150						

50-150

79.9 %

01AMB978SL (M106095-04) Soil		Sampled: 06/30/01 Received: 06/30/01						
Benzene	ND	0.0591	mg/kg dry	50	!1B BTEX/MTI	06/30/01	07/01/01	0106107
Toluene	ND	0.236	"	"	"	"	"	"
Ethylbenzene	ND	0.236	"	"	"	"	"	"
Xylenes (total)	ND	0.473	"	"	"	"	"	"
Naphthalene	ND	2.36	"	"	"	"	"	"
Surr: 4-RFR	83.7%	50-150						

North Creek Analytical - Mobile Lab



Reported:

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503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 07/03/01 10:14

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB979SL (M106095-05) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0665	mg/kg dry	50	!1B BTEX/M	Π 06/30/01	07/01/01	0106107	
Toluene	ND	0.266	"	"	"	"	"	"	
Ethylbenzene	ND	0.266	"	"	"	"	"	"	
Xylenes (total)	ND	0.532	"	"	"	"	"	"	
Naphthalene	ND	2.66	"	"	"	"	"	"	
Surr: 4-BFB	84.7 %	50-150							
01AMB980SL (M106095-06) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0587	mg/kg dry	50	!1B BTEX/M	TI 06/30/01	07/01/01	0106107	
Toluene	ND	0.235	"	"	"	"	"	"	
Ethylbenzene	ND	0.235	"	"	"	"	"	"	
Xylenes (total)	ND	0.469	"	"	"	"	"	"	
Naphthalene	ND	2.35	"	"	"	"	"	"	
Surr: 4-BFB	82.5 %	50-150							
01AMB981SL (M106095-07) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0693	mg/kg dry	50	!1B BTEX/M	Π 06/30/01	07/01/01	0106107	
Toluene	ND	0.277	"	"	"	"	"	"	
Ethylbenzene	0.310	0.277	"	"	"	"	"	"	
Xylenes (total)	ND	0.554	"	"	"	"	"	"	
Naphthalene	ND	2.77	"	"	"	"	"	"	
Surr: 4-BFB	96.3 %	50-150							
01AMB982SL (M106095-08) Soil					Sampled: 06	/30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0529	mg/kg dry	50	!1B BTEX/MT	ΓΙ 07/01/01	07/01/01	0107002	
Toluene	ND	0.212	"	"	"	"	"	"	
Ethylbenzene	ND	0.212	"	"	"	"	"	"	
Xylenes (total)	ND	0.423	"	"	"	"	"	"	
Naphthalene	ND	2.12	"	"	"	"	"	"	
Surr: 4-BFB	80.8 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Reported: 07/03/01 10:14

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMB983SL (M106095-09) Soil					Sampled: 06/	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0680	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.272	"	"	"	"	"	"	
Ethylbenzene	ND	0.272	"	"	"	"	"	"	
Xylenes (total)	ND	0.544	"	"	"	"	"	"	
Naphthalene	ND	2.72	"	"	"	"	"	"	
Surr: 4-BFB	80.0 %	50-150							
01AMB984SL (M106095-10) Soil					Sampled: 06/	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0582	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.233	"	"	"	**	"	"	
Ethylbenzene	ND	0.233	"	"	"	"	"	"	
Xylenes (total)	ND	0.465	"	"	"	"	"	"	
Naphthalene	ND	2.33	"	"	"	"	"	"	
Surr: 4-BFB	73.6 %	50-150							
01AMB985SL (M106095-11) Soil					Sampled: 06/	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0644	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.257	"	"	"	**	"	"	
Ethylbenzene	ND	0.257	"	"	"	"	"	"	
Xylenes (total)	ND	0.515	"	"	"	"	"	"	
Naphthalene	ND	2.57	"	"	"	"	"	"	
Surr: 4-BFB	73.8 %	50-150							
01AMB986SL (M106095-12) Soil					Sampled: 06/	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0597	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.239	"	"	"	"	"	"	
Ethylbenzene	ND	0.239	"	"	"	"	"	"	
Xylenes (total)	ND	0.478	"	"	"	"	"	"	
Naphthalene	ND	2.39	"	"	"	"	"	"	
Surr: 4-BFB	73.9 %	50-150							

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/03/01 10:14

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMB987SL (M106095-13) Soil					Sampled: 06/3	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0668	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.267	"	"	"	"	"	"	
Ethylbenzene	ND	0.267	"	"	"	"	"	"	
Xylenes (total)	ND	0.534	"	"	"	"	"	"	
Naphthalene	ND	2.67	"	"	"	"	"	"	
Surr: 4-BFB	75.1 %	50-150							
01AMB988SL (M106095-14) Soil					Sampled: 06/3	30/01 Rece	eived: 06/30/	01	
Benzene	ND	0.0602	mg/kg dry	50	!1B BTEX/MT	1 07/01/01	07/01/01	0107002	
Toluene	ND	0.241	"	"	"	"	"	"	
Ethylbenzene	ND	0.241	"	"	"	"	"	"	
Xylenes (total)	ND	0.482	"	"	"	"	"	"	
Naphthalene	ND	2.41	"	"	"	"	"	"	
Surr: 4-BFB	75.7 %	50-150							

North Creek Analytical - Mobile Lab



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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/03/01 10:14

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Dilution	Method Pre	epared	Analyzed	Batch	Notes
01AMB975SL (M106095-01) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0)1	
% Solids	84.5	0.0100 % by Weight	1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB976SL (M106095-02) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0	01	
% Solids	79.9	0.0100 % by Weight	1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB977SL (M106095-03) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0	01	
% Solids	85.5	0.0100 % by Weight	1	•	01/01	07/02/01	0107009	
01AMB978SL (M106095-04) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0)1	
% Solids	78.2	0.0100 % by Weight	1		01/01	07/02/01	0107009	
01AMB979SL (M106095-05) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0	01	
% Solids	89.0	0.0100 % by Weight	1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB980SL (M106095-06) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0	01	
% Solids	89.0	0.0100 % by Weight	1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB981SL (M106095-07) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0	01	
% Solids	78.1	0.0100 % by Weight	1	Gravimetric 07/	01/01	07/02/01	0107009	
01AMB982SL (M106095-08) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0)1	
% Solids	85.1	0.0100 % by Weight	1		01/01	07/02/01	0107009	
01AMB983SL (M106095-09) Soil				Sampled: 06/30/01	Rece	ived: 06/30/0)1	
% Solids	78.1	0.0100 % by Weight	1	•	01/01	07/02/01	0107009	

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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

07/03/01 10:14

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB984SL (M106095-10) Soil					Sampled: 06/3	30/01 Rece	ived: 06/30/	01	
% Solids	83.8	0.0100 %	by Weight	1	Gravimetric	07/01/01	07/02/01	0107009	
01AMB985SL (M106095-11) Soil					Sampled: 06/3	30/01 Rece	ived: 06/30/	01	
% Solids	83.0	0.0100 %	by Weight	1	Gravimetric	07/01/01	07/02/01	0107009	
01AMB986SL (M106095-12) Soil					Sampled: 06/3	30/01 Rece	ived: 06/30/	01	_
% Solids	87.4	0.0100 %	by Weight	1	Gravimetric	07/01/01	07/02/01	0107009	
01AMB987SL (M106095-13) Soil					Sampled: 06/3	30/01 Rece	ived: 06/30/	01	_
% Solids	88.1	0.0100 %	by Weight	1	Gravimetric	07/01/01	07/02/01	0107009	
01AMB988SL (M106095-14) Soil					Sampled: 06/3	30/01 Rece	ived: 06/30/	01	
% Solids	80.7	0.0100%	by Weight	1	Gravimetric	07/01/01	07/02/01	0107009	

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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/03/01 10:14

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) ner AK102 - Quality Control

Die	esel Hydrocar	bons (C10	-C25) p	er AK1	02 - Qu	ality Co	ontrol			
	Nort	th Creek A	nalytica	al - Mo	bile Lal	b				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0107003 - 3545 ASE										
Blank (0107003-BLK1)				Prepare	d & Analy	zed: 07/0	1/01			
Diesel Range Organics	ND	150 r	ng/kg wet							
Surr: 1-Chlorooctadecane	25.3		"	23.4		108	50-150			
Surr: Triacontane	17.9		"	23.4		76.5	50-150			
LCS (0107003-BS1)	Prepared & Analyzed: 07/01/01									
Diesel Range Organics	1100	150 r	ng/kg wet	1250		88.0	75-125			
Surr: 1-Chlorooctadecane	24.2		"	23.4		103	50-150			
Surr: Triacontane	33.5		"	23.4		143	50-150			
LCS Dup (0107003-BSD1)	Prepared & Analyzed:						1/01			
Diesel Range Organics	1100	150 r	ng/kg wet	1250		88.0	75-125	0	20	
Surr: 1-Chlorooctadecane	24.7		"	23.4		106	50-150			
Surr: Triacontane	32.8		"	23.4		140	50-150			
Matrix Spike (0107003-MS1)	So	urce: M1060	95-01	Prepare	d & Analy	zed: 07/0	1/01			
Diesel Range Organics	1840	150	mg/kg dry	1470	256	108	60-140			
Surr: 1-Chlorooctadecane	34.6		"	27.6		125	50-150			
Surr: Triacontane	20.0		"	27.6		72.5	50-150			
Batch 0107010 - 3545 ASE										
Blank (0107010-BLK1)				Prepare	d & Analy	zed: 07/0	2/01			
Diesel Range Organics	ND	150 г	ng/kg wet	-	•					
Surr: 1-Chlorooctadecane	20.7		"	23.4		88.5	50-150			
Surr: Triacontane	21.8		"	23.4		93.2	50-150			
LCS (0107010-BS1)				Prepare	d & Analy	zed: 07/0	2/01			
Diesel Range Organics	1050	150 r	ng/kg wet	1250		84.0	75-125			
Surr: 1-Chlorooctadecane	17.5		"	23.4		74.8	50-150			
Surr: Triacontane	20.8		"	23.4		88.9	50-150			

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%REC

50-150

50-150

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Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

83.1

95.6

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Surr: 1-Chlorooctadecane

Surr: Triacontane

Project Manager: Anne Kranawetter

07/03/01 10:14

RPD

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Spike

29.5

29.5

Source

Reporting

24.5

28.2

Analyte	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0107010 - 3545 ASE									
LCS Dup (0107010-BSD1)			Prepare	d & Analy	yzed: 07/0	2/01			
Diesel Range Organics	1120	150 mg/kg wet	1250		89.6	75-125	6.45	20	
Surr: 1-Chlorooctadecane	20.2	"	23.4		86.3	50-150			
Surr: Triacontane	20.9	"	23.4		89.3	50-150			
Matrix Spike (0107010-MS1)	Sour	ce: M106095-07RE1	Prepare	d & Analy	yzed: 07/0	2/01			
Diesel Range Organics	1720	150 mg/kg dry	1570	ND	109	60-140	·		

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503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/03/01 10:14

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0106107 - MeOH Extraction

Blank (0106107-BLK1)			Prepared &	Analyzed: 06/30/01	
Benzene	ND	0.0250 mg/kg w	ret		
Toluene	ND	0.100 "			
Ethylbenzene	ND	0.100 "			
Xylenes (total)	ND	0.200 "			
Naphthalene	ND	1.00 "			
Surr: 4-BFB	2.45	"	2.50	98.0 50-150	
LCS (0106107-BS1)			Prepared &	Analyzed: 06/30/01	
-				0.1.1	

LCS (0106107-BS1)				Prepared &	Analyzed: 06/3	0/01	
Benzene	2.11	0.0250 mg	g/kg wet	2.50	84.4	69-138	
Toluene	2.28	0.100	"	2.50	91.2	53-151	
Ethylbenzene	2.55	0.100	"	2.50	102	61-141	
Xylenes (total)	7.23	0.200	"	7.50	96.4	62-141	
Naphthalene	2.96	1.00	"	2.50	118	65-135	
Surr: 4-BFB	2.64		"	2.50	106	50-150	

Batch 0107002 - MeOH Extraction

Xylenes (total) Naphthalene

Surr: 4-BFB

Blank (0107002-BLK1)			Prepared & Analyzed: 07/0	01/01
Benzene	ND	0.0250 mg/kg wet		
Toluene	ND	0.100 "		
Ethylbenzene	ND	0.100 "		
Xylenes (total)	ND	0.200 "		
Naphthalene	ND	1.00 "		
Surr: 4-BFB	2.41	"	2.50 96.4	50-150
LCS (0107002-BS1)			Prepared & Analyzed: 07/0	01/01
Benzene	2.06	0.0250 mg/kg wet	2.50 82.4	69-138
Toluene	2.23	0.100 "	2.50 89.2	53-151
Ethylbenzene	2.42	0.100 "	2.50 96.8	61-141

7.50

2.50

2.50

7.22

2.61

2.61

0.200

1.00

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62-141

65-135

50-150

96.3

104

104



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Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 07/03/01 10:14

Notes and Definitions

D-14 Hydrocarbon pattern and range are consistent with Kerosene-like hydrocardon. (Washington State Chromatograms Appendix 6).

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M106095 FINAL 07 03 01 1014.mdb
			Default Report (not modified)
M106095-01	8021B BTEX/MTBE/N	4-BFB	S-02
M106095-01	8021B BTEX/MTBE/N	4-BFB	Exceeds upper control limit
M106095-01	AK102 (DRO)	Diesel Range Organics	D-14